ENVIRONMENTAL QUALITY SERVICE COUNCIL

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NOTE: The full Environmental Quality Service Council has not yet voted on the content of this report

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Recommendation from EQSC Triennial Review Subcommittee: Set 2
Senator Beverly J. Gard, Chairman

D. The State should have an antidegradation regulation consistent with federal regulation but must not include more precise conditions until the current federal antidegradation rulemaking establishes what the national policy on such directions should be.

The current Indiana antidegradation language in effect for years grants IDEM the power to implement an antidegradation policy to the same degree of specificity as present in the federal regulation. The federal government is in the midst of antidegradation rulemaking to resolve what it says is inconsistency among states as they apply this vague regulation.

The NPDES permit policy says that all discharges must be such that the water quality standards in the receiving waters are always met (therefore all its designated uses always protected). The antidegradation policy says that, even so, all increased discharges must be demonstrated to have social or economic value beyond the "degradation" the incremental increase might pose. "Degradation" is not defined operationally.

Any future Indiana policy or regulation on antidegradation a) should be consistent with federal regulation, b) have a specified de minimis amount of projected concentration increase in the receiving waterbody which triggers the requirement for an antidegradation demonstration, and c) have a clear notion of the how to evaluate the factors in a demonstration including, but not limited to, 1) employment, 2) production, 3) community tax base, 4) housing, and 5) correction of environmental or public health problem.

We note that Indiana does have a specific antidegradation policy applying to bioaccumulative chemicals of concern which are discharged into waters draining into the Great Lakes. The reason for this special antidegradation protection is clear (to protect these lakes from persistent toxic compound accumulation in fish) and the procedures to follow are clear. And the regulation is consistent with the federal regulation and so there is no reason to change this particular state regulation.

The General Assembly should direct the Water Pollution Control Board to maintain in Indiana the wording of the 1990 antidegradation regulatory language (for the Great Lakes Basin regions in Indiana, including the federal bioaccumulative chemical of concern antidegradation policy) and not to change it until federal rulemaking on antidegradation has clarified a consistent national policy.

IDEM should establish a work group of representative stakeholders to monitor and contribute to the development of the federal antidegradation regulation in order to develop an appropriate Indiana draft regulation in an appropriate and timely manner.

E. The current general factors for assigning the special categories of waterbodies such as Outstanding National Resource Water and Outstanding State Resource Waters should be changed and expanded to increase commitment of the State for special and more appropriate controls on potential dischargers and land use in certain watersheds.

The current Indiana regulation establishing a category of "Outstanding State Resource Waters" with the requirement that no degradation occur, taken literally, places the State in the untenable position of having no discretion but to discourage or prevent many types of alteration to a point source or land use which the State considers beneficial. With the extraordinary public health, environmental health and economic development challenges facing the expansive area of northern Indiana communities that drain into waters going to Lake Michigan, assigning Lake Michigan to such constraints is counterproductive.

The core intent of the special categories is to protect waters already pristine and to improve the Lake Michigan water quality, a waterbody with multiple uses and accepting drainage from urban, industrial and agricultural lands. This intent should be maintained and the policy adjusted to assure this happens more expeditiously and with less interference with other critical quality of life and public health objectives.

We note that the surface water regulations themselves are set to maintain and improve all water quality in the State. These other special categories of waterbodies are either to "maintain and protect" an already pristine situation or to establish a special State commitment to achieve such goals faster or to achieve different water quality objectives, such as aesthetic.

We note that it is necessary for the state government to have the authority to assign certain waters which "constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected." (40 CFR 131.12(a)(3)) Because the ramifications of this could have widespread economic and environmental significance, the General Assembly should make that assignment of "Outstanding National Resource Waters" in Indiana.

1. The General Assembly directs the Water Board to adjust the factors for special categories of waters consistent with the following general guidelines:

a. Outstanding National Resource Waters-waters which constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance and for which the water quality is to be maintained and protected in its existing state with no degradation allowed. The designation of the Outstanding National Resource Waters should be made by the General Assembly.

b. Outstanding State Resource Water-Waters with this designation shall have a State Commission established to monitor the water quality studies performed, to set chemical, physical and biological parameter goals to attain and maintain, to facilitate public discussion and involvement, to suggest antidegradation goals and to monitor progress toward attaining its water goals. Each Commission composed of representative stakeholders from the affected area should have funds to support scientifically-sound studies in their waterbody. The first Commission established should be the Lake Michigan Water Quality Commission.

2. The General Assembly should establish a process to declare certain waterbodies Special Native Habitat Waters and to manage appropriately the drainage basin feeding it. Such Special Native Habitat Waters should be fed or recharged by waters from land which is managed as natural; no alteration to that land use should be allowed which would adversely alter the natural quality of surface water runoff; no increased point source discharge measured by flow, concentration or load should be allowed. Because such a designation severely restricts the economic development potential of the land, the designation should be made by the General Assembly or the Governor and development rights from private landholders be purchased by the State.

F. Indiana must have scientifically-based, appropriate designated uses for Indiana waterbodies.

Some waterbodies in Indiana have had designated uses assigned them by regulation which could never achieve the use. Assignments were made by IDEM in absence of demonstration of the possibility of the attainment due to lack of IDEM resources.

The absence of scientific demonstration by IDEM of appropriate designated uses for Indiana waterbodies has resulted in some seriously flawed permitting dilemmas. For instance, waters that need to have land uses and point source discharges regulated to protect daily swimmers is appropriate only in those Indiana waters where there could be daily swimmers needing that protection.

Certain stretches of streams have different potential uses than others. Public and private resources should be targeted at achieving and maintaining high quality of water for all appropriately designated uses; extra resources should not be devoted toward achieving a water quality necessary only for inachievable uses.

IDEM should explore adding subcategories of the fishability and aquatic protection designated use to stream segments which by their physical environment would not meet the ideal use category. For instance, an urban aquatic community and an agriculture drainage ditch aquatic community would be different habitats than those streams which could flow in manner to support a more "natural" habitat. When watershed TMDLs are established, those subcategories should be the endpoint uses for those waters while downstream segments with other designated uses would still be protected at those downstream points.

IDEM should be directed to study those waterbodies where there could be doubt about potential of achieving a particular designated use before requiring point sources or nonpoint sources to invest in control measures to meet a standard of that use. Procedures for community demonstration of use attainability should be prepared using a public process.

G. The State should establish a coherent policy on sediment quality and on biological integrity as an indicator of the aquatic health of a waterbody.

1. Sediment Policy

Sediments serve a critical role in the function and character of an aquatic ecosystem. Small and large organisms live in them and off of them. What is a good sediment is not a straightforward measurement. Its very presence at certain times hurts certain biological systems and is essential to others. Different biological systems @ve under different sediment conditions. However, if the State declares that a particular waterbody shall be managed for a particular aquatic ecosystem then general guidelines can be established about the appropriate sediment character desired.

Establishing particular chemical characteristics as being acceptable or unacceptable for a particular aquatic ecosystem is much more problematic, as USEPA researchers have discovered as they have tried to craft a national sediment quality policy. Thus far, setting concentrations and setting policy on thoroughness of information from sampling data is best left to be a site-specific determination.

IDEM should develop general, scientifically-based policies about sediment remediation using risk-based techniques consistent with its current policy development about remediation policies for contaminated soil.

A general statement as proposed in the current triennial review rulemaking to say it is a minimum criteria that all sediment should be okay at all times is too vague to provide useful guidance to understand what is expected and yet provides apparently unbridled authority to IDEM to enforce its own judgment about sediment quality. General authorities already exist for IDEM to act if it believes public or environmental health are threatened by water pollution.

An improvement on policy for sediments, in particular on the general authorities of IDEM, should be made with careful deliberation involving the public. It should be made with an understanding of the nature of sediments an expanded language is to address, current status of the sediments with respect to the changes in policy the new policy is intended to address and the anticipated impacts on government, regulated and habitat as the result of the new wording. The intended and unintended effects that the new wording would have both on sediment remediation decisions and on regulation of discharge of substances by point and nonpoint sources should be considered.

2. Biological integrity criteria policy

The ultimate objective for the aquatic ecosystem protection aspect of surface water quality is to restore and maintain desired habitats.

Establishing exactly what those desired habitats are for each part of each waterbody is an important challenge. It is a challenge to establish a scientific formula and method to evaluate a naturally changing mix of organisms to determine what is the "current" situation over a particular several year period. It is also an important policy challenge to determine just what ought to be the ideal mix of organisms in an altered waterbody.

The current proposed triennial rulemaking gives absolute authority to IDEM to enforce against any permit holder to achieve what IDEM determines to be the answer to the two questions of how to evaluate the organisms quality and type as being good or bad and of how to determine which waterbody ought to have which type of "good" mixture. In fact, in wording currently proposed, a discharger could be accused by IDEM of violating the standard any time the quantity and type of organisms different from IDEM's current judgment of what ought to be there.

Expanded attention is developing the tools to evaluate biological integrity of Indiana waterbodies is good. Increased evaluations are good. Adjusting permits so that measurable discharge limits will, in IDEM's technically-based judgment caused the desired biological integrity to be achieved is good.

IDEM should continue these efforts and should do with the involvement of all interested stakeholders.

IDEM should report to the Environmental Quality Service Council in writing its policy suggestions and implications for an expanded sediment criteria policy and biological integrity criteria policy. The Water Pollution Control Board should be prohibited from promulgating regulations changing the nature or extent of its authority over sediments as criteria or adding biological integrity as criteria until the completion of the study.